

REMARKS

In accordance with the foregoing, the specification has been amended to explain the basis of a 360 micron dimension recited in claims 9 and 12, with reference to Figure 8 and page 10 of the disclosure, and of a 300 micron dimension recited in claims 14 and 15, with reference to Figure 9 and page 11 of the disclosure.

Further, in accordance with the foregoing, the specification and claims have been amended to improve form and to clarify salient features of the invention. Now new matter is presented and, accordingly, approval and entry of the foregoing specification and claims amendments are respectfully requested.

Objection to Claims 19, 9 and 12 Under 35 U.S.C. 132 for allegedly introducing new matter

The rejection is respectfully traversed.

Claim 19

As clarified in amended claim 19, the first discharge electrode part comprises a first tip part having a convex shape and the second discharge electrode part comprises a second tip part having a concave shape. This configuration is disclosed in FIG. 10 of the present application, where "The discharge electrode XT_1 has a convex tip part T_A defined by oblique line parts T_b and T_c (forming an edge part of the discharge electrode XT_1), while the discharge electrode XT_2 has a concave tip part T_B defined by oblique line parts T_d and T_e (forming an edge part of the discharge electrode XT_2)." (Page 12, lines 7-13 of the specification).

Claims 9 and 12

The feature of claims 9 and 12, and particularly the basis for the dimension recitation of "a pitch of 360 micron", is disclosed in Fig. 8 of the present application. Referring to Fig. 8, "Each of the discharge electrodes XT and YT includes the tip part T_A and the neck part T_B . In this embodiment, the width A of the tip part T_A is reduced from a conventional dimension of 160 μm to 120 μm so as to secure a (positioning) margin of 90 μm between each discharge electrode XT or YT and the rib 11C adjacent thereto." (Page 10, lines 7-13). Further, "each rib 11C has a width of 60 μm " (Page 5, lines 17-18). Accordingly, the pitch between the ribs 11C (partition walls) 11C is $90 \text{ (margin)} \times 2 + 120 \text{ (tip part } T_A \text{ width)} + 60 \text{ (rib 11C width)} = 360 \mu\text{m}$, as has been introduced in the specification at the end of the paragraph at page 10, lines 7-13.

Accordingly, it is respectfully submitted that claims 19, 9 and 12 are clearly supported by the original disclosure (35 USC §112, first paragraph) and, therefore, the above-described

rejection by the Examiner should be withdrawn.

Rejection of claims 9-10, 12-15 and 19 under 35 USC §112, first paragraph, as failing to comply with the written description requirement

Claims 9 and 12

With respect to claims 9 and 12, the new limitation of "a pitch of 360 μm " is supported by original specification as described above in reference to the rejection of claims 1, 9, 12 and 19 under 35 USC §132.

Claims 14 and 15

With respect to claims 14 and 15, the common limitation of "60 micron or greater" of claims 14 and 15 is disclosed in Fig. 9 of the present application. In Fig. 9, the minimum margin between the tip part T_A of each discharge electrode XT or YT and the respective, adjacent rib 11C is clearly indicated as 60 μm . Further, according to FIG. 9, the width of the tip part T_A is 120 μm , and the width of the rib 11C is 60 μm as explained in page 5, lines 17-18. Accordingly, the pitch between the ribs 11C (partition walls) is $60 \text{ (margin)} \times 2 + 120 \text{ (tip part } T_A \text{ width)} + 60 \text{ (rib 11C width)} = 300 \text{ } \mu\text{m}$. Accordingly, it is submitted that claims 14 and 15 are supported by the specification and the drawings.

Claim 19, as amended hereinabove, now recites related first and second tip parts respectively of convex and concave shapes and the same are clearly disclosed in Figure 10, as discussed above in reference to the rejection under 35 U.S.C. §132.

Thus, it is submitted that claims 9-10, 12-15 and 19 are supported by the original disclosure and, therefore that the above-described rejection by the Examiner should be withdrawn.

Rejection of claims 1, 3, 5-8, 11, 16-17, 19-20 and 21 under 35 U.S.C. §102(e) as being anticipated by Hashimoto

Independent claims 1, 11 and 16, as amended hereinabove, clearly specify that the claimed plasma display device herein includes a plurality of partition walls formed on the second substrate so as to extend perpendicularly to the first and second electrodes, the partition walls each separating an array of first and second discharge electrode parts from an adjacent array of first and second discharge electrode parts, and that the first and second discharge electrode parts extend toward each other in parallel with, but not overlapping, the partition walls.

The above-described feature of the present invention allows a discharge area to be restricted to the center of each discharge cell. According to Hashimoto, a discharge gap exists diagonally in each cell (in the case of Figure 1, each area defined by a rectangle defined by X and Y display electrodes as upper and lower sides and barrier ribs 29 (partition walls) as right and left sides). That is, a discharge occurs diagonally in the cell.

By contrast, according to the present invention, since a discharge occurs in a center part of each discharge cell, it is possible to evenly utilize phosphors on each partition wall side.

Further, since the discharge gap is disposed so as to avoid the partition walls, a discharge is prevented from occurring in the vicinity of the partition walls. If a discharge occurs in the vicinity of the partition walls, electric charges generated by the discharge are absorbed into the partition walls so that discharge efficiency is reduced; moreover, if the partition walls include minute irregularities, there is a fear that an improper discharge to the adjacent right and left cells may occur.

Hashimoto fails to teach or suggest the above-described, claimed configuration and accompanying effects of the present invention.

The respective dependent claims, depending from independent claims 1, 11 and 16, inherit the patentable distinctions of the recitations thereof and thereby distinguish over Hashimoto for these same reasons.

Accordingly, it is submitted that claims 1, 3, 5-8, 11, 16-17 and 19-20 are allowable over Hashimoto.

With respect to independent claim 21, the Examiner refers to column 8, lines 45-63 of Hashimoto, and asserts that the feature of claim 21 of the "the first angle being determined so that a length of the first edge part minimizes a discharge starting voltage and a drive current for sustaining discharge and is longer than a width of the first electrode part measured in first direction" is disclosed in Hashimoto, stating "such inclined or oblique branch electrode structure reduces power loss, in other words reduces the staring [sic ---start--] voltage and drive current." (Action at page 7, lines 1-3)

However, according to the portion of Hashimoto relied upon in the Action, "power loss" in Hashimoto results from the inter-line capacitance between the distal end portion 12a of the branch electrode 12 and either of the opposed bus electrode 13. Thus, in Hashimoto, "power loss" does not relate to a discharge starting voltage and a drive current for sustaining discharge, which is related to "a length of the first edge part" according to the present invention. Instead, Hashimoto merely discloses a reduction of power loss by spacing in the distal end portion 12a of the branch electrode 12 by a sufficient distance from the opposed bus electrode 13 in the

configuration of FIG. 10, and fails to disclosure or suggest "the first angle being determined so that a length of the first edge part minimizes a discharge starting voltage and a drive current for sustaining discharge and is longer than a width of the first electrode part measured in first direction."

Accordingly, it is submitted that claim 21 is allowable over Hashimoto.

REJECTION OF CLAIMS 2 AND 18 FOR OBVIOUSNESS UNDER 35 USC 103(a)

Claims 2 and 18 depend from independent claims 1 and 16, respectively, and accordingly inherit the patentably distinguishing features of their respective independent claims. Accordingly, it is submitted that claims 2 and 18 will be allowable once the above-described rejection of independent claims 1 and 16 is withdrawn.

CONCLUSION

In accordance with the foregoing, it is respectfully submitted that the pending claims patentably distinguish over the references of record taken singly or in any proper combination and, there be no other objections or rejections, that the application is in condition for allowance, which action is earnestly solicited.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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